

ART WILDHAGEN

Engineering Open House 1965

THOUGHT YOU MIGHT LIKE A COPY OF THE
LATEST LIST OF EXHIBITS

DAVE O'BRYEN

Electrical Engineering Building:

For Electrical Engineering Department:

R.F. Plasma Torch	Radio Controlled Ball
Sonar Demonstration	Digital Computer
G-20 Computer	Analog Computer
U of I Train	Zetetics
Integrated Circuits Demonstration	Closed Circuit T.V.
Radio Controlled Ball	WPGU
Magnetic Cannon	Ozzie Scope Face
Microwave Goubau Beam	Stereo HiFi
Hall Generator	Laser
The Fun House	Voice Tran. on Light Beam
EE Information	Motor Controls
Goubau Beam (Micro #2)	Color Organ
Microwaves (Polarization)	Servomechanisms
U of I Train	Strength Tester
Integrated Circuits	R.F. Plasma Torch
Magnetic Cannon	Logical Switching Circuits
G-20	Mutual Inductance
Parabolas	Sonar #1
Jacob's Ladder	Sonar #2
Lie Detector	Water Drop Generator
Tesla Coil	Synton
Sensing Devices	
R.F. Power Trans.	
Parametric Amp.	
PLATO	
Diffraction of a Laser Beam and Microwaves	
Link Spray Oscillograph	

For Arnold Air Society:

Engineering Opportunities in Air Force Minuteman Missile (Outside)
Air Force R.O.T.C. Systems Display in Rms. 50K and 50L

Talbot Laboratory:

For Soil Mechanics (Civil Engineering)
Structure Settlement
Foundation Piling
Quick Sand Demonstration
Soil Sampling Devices

Agriculture Engineering:

Model of a Watershed	Farmstead Automation
Mathematics of Tile Drainage	Film <u>S.P.F. Hogs</u>
Strain Gauged Truss	Textbook Display
Machinery Display and Demonstration	Lab. Tours
Environmental Controlled Equipment	

Digital Computer Laboratory

Foundry:

For Civil Engineering:

Surveying One of the Oldest and
Newest Engineering Sciences
(In Foundry Woodshop)

For Mechanical Engineering:

Pouring of Aluminum Souvenirs

Aeronautical Engineering Laboratory B:

For Aeronautical and Astronautical Engineering:

Plasma Jet

Propane Rocket

Supersonic Windtunnel

Subsonic Windtunnel With Wing

Shock Study Tube

Orbits and Trajectories

Crypto Compressor

Industries - NASA

Pratt & Whitney

Aero Structures

Explosion Combustion

Ramjet

Turbulent Combustion

Turbine & Compressor Parts

Engineering Research Laboratory

Mechanical Engineering Laboratory:

For Mechanical Engineering:

Equipment Display

Vanishing Liquid

Transportation Building:

For General Engineering:

Drawings by Computer

Paint Your Own Design

Counseling Service

International Harvester Exhibit

Aeronautical Engineering Building A:

For Aeronautical and Astronautical Engineering:

Subsonic Windtunnel

Ceramics Building:

For Ceramic Engineering:

Frit. Pots in Operation

Phase Equilibria

Pushing Spark Plugs Through Steel Refractories Display

Glass Products

Enamel Products

Ceramic Photocell

TAM

Concrete Cylinders
 Fluids & Hydraulics
 Flow & Fracture of Metals
 Fatigue

Materials Testing
 Dynamics & Vibrations
 Exp. Stress Analysis

Mechanical Engineering Building:**For Mechanical Engineering:**

Internal Combustion Engine
 Welding Equipment
 Machine Design
 Metal Cutting Laboratory

Analog Computer
 Heat Treatment of Metals
 Laboratory

For Naval R.O.T.C.

Model of Phantom II
 Model of Mercury
 Model of Gemini

Film "Phantom Joins the Fleet"
 Film "Project Gemini"

East Chemistry Building:

Products
 Dyes
 Analog Computer
 Instrumentation
 Unit Operations

For Chemical Engineering:

Chemical Pop
 Chemical Magic Show

Metallurgy and Mining Building:**For Metallurgical and Mining Engineering:**

Powder Metallurgy
 Bubble Raft
 Heat Treatment of Ferrous
 Materials
 A.S.M. Photo - Micrograph
 Gold - Cadmium Experiment
 Metallurgical Engineering
 Curriculum Information Booth

Zinco
 Phase Transformations in B Brass
 Metal Oddities
 Film - Unknown as yet
 Dislocations in Metals

Civil Engineering Hall:**For Civil Engineering:**

Construction
 Man with 1000 hands
 The eighth (8th) Sea
 C.P.M. Planning
 C.P.M. Scheduling
 Limit Resources
 Calendar Date Conversion
 Computer Analyzation
 Information Display

(4)

Highways (with a 3-minute movie to supplement the exhibit)

There is more to a road than meets the eye

Getting a million people to work

Torture test for pavement

Stresses in a pavement under load

Hydraulics

Visual display of operating efficiency of drainage culverts

Water resource planning project

Air cushion craft

Electronically controlled rain

Basic Fluid mechanics in action

Ground water analog model

Pneumatic breakwater

Railroads

All aboard at Champaign

Building of a railroad

Problems in railroads

Automating railroads

Sanitation

The role of the Sanitary Engineer in the space age

The conversion of organic waste to useful energy

Soil Mechanics

Quicksand

Consolidation test

Compression test

Settlement of structures

Theory of consolidation

Foundation Piling

Classification of soils

Soil sampling devices

Surveying

One of the oldest and newest engineering sciences

Traffic

The Big Board

The vehicles friend

Parking meters

Traffic sign construction

C.C. Wiley license plate collection

Traffic signal progression exhibit (with model vehicles)

Solving the Green Street traffic problem

The signal light brain

Chi Epsilon

Glen Canyon Dam Model

Structures

DEPARTMENT OF COMPUTER SCIENCE

---cathode ray tube and computer--- room 127 dcl
---data processing and service--- room 154 dcl
---hybrid digital-analog circuit applications--- 203 & 321 dcl

DEPARTMENT OF MECHANICAL & INDUSTRIAL ENGINEERING

---foundry---
---internal combustion engine---
---computers---
---Plato---
---Pi-Tau-Sigma---
---water table---
---ash tray mfg.---
---design models---
---air flow---
---Plasma---
---heat transfer---
---motorcycle testing---

DEPARTMENT OF CERAMIC ENGINEERING

---application of glassy coatings to substrates---
---properties of modern ceramic materials---
---ceramics and temperature---
---ceramographic exhibit---

DEPARTMENT OF CIVIL ENGINEERING

---building and bridge design---
---materials for construction---
---transportation systems---
---water and air pollution control---
---water conservation and use---
---photogrammetric and geodetic engineering---
---building in the ocean---

DEPARTMENT OF CHEMICAL ENGINEERING

---glass distillation column---
---stirred tank reactor---
---glass absorption tower - chem pop---
---fluidized bed regenerator---

DEPARTMENT OF PHYSICS

---halograms---
---microwave interference and diffraction---
---magnetism and motion---
---lasers---
---spark chambers---
---JETS exhibit---

DEPARTMENT OF GENERAL ENGINEERING

- graphics---
- the student engineer---
- engineering law and history---
- design problems in industry---
- the product of an engineering education---

DEPARTMENT OF ENGINEERING MECHANICS

- fluid mechanics---
- buckling, tension and compression---
- plastic strain experiment---

DEPARTMENT OF AGRICULTURAL ENGINEERING

- rural waste management---
- pilotless prime mover---
- automated materials handling---
- soil dynamics and soil bin studies---
- student branch exhibit---

DEPARTMENT OF AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

- Boeing SST model---
- Ram Jet---
- Supersonic and Subsonic wind tunnels---
- Plasma Jet---
- Orbits and Trajectories---

DEPARTMENT OF ELECTRICAL ENGINEERING

- demonstration classes---
- lab tours---
- plasma torch---
- laser and radar---
- halography---
- SWE---

DEPARTMENT OF METALURGY AND MINING

- X-ray studies of metals---
- physics of metalurgy---
- powder---
- corrosion---

Equipment for 1965 Railway Track Exhibit
Engineering Open House

The equipment for this year's display will include:

GP-9 Diesel Locomotive
Illinois Central Diesel Instruction Car
Dining Car
Streamlined Coach
Piggyback Car with Highway Trailers
Caboose
Rail Detector Cars
Ballast Conditioning Equipment

The display will be held at:

Stadium Drive and S. Neil Street

The hours of operation are:

Friday, March 12: 10 AM to 8 PM

Saturday, March 13: 9 AM to 3 PM